

LISTING OF AND AMENDMENTS TO CLAIMS:

1. (previously presented) A composite asymmetric microfilter structure comprising at least one separation membrane, the at least one separation membrane comprising a spin-on glass selected from the group consisting of siloxanes, silsesquioxanes, N-silsesquioxanes, and polycabosilanes, atop a support membrane, the support membrane being selected from the group consisting of silicon, silicon dioxide, silicon nitride, germanium and any combination thereof.
2. - 8. (canceled)
9. (original) An array comprising a plurality of the composite microfilter structure recited in claim 1.
10. (previously presented) The structure recited in claim 1, wherein the support membrane comprises a porous silicon wafer.
11. (previously presented) The structure recited in claim 1, wherein the separation membrane is about 1 μm thick.
12. (original) The structure recited in claim 1, wherein the separation membrane is lithographically patterned with a plurality of micropores therethrough.
13. (currently amended) The structure recited in claim 12, wherein the support membrane is provided with a plurality of micropores therethrough having broader average diameter

than the plurality of micropores of the separation membrane.

14. - 26. (canceled)

27. (currently amended) A composite asymmetric microfilter structure comprising at least one separation membrane, the at least one separation membrane comprising a spin-on glass selected from the group consisting of siloxanes, silsesquioxanes, N-silsesquioxanes, and polycabosilanes, atop a support membrane, the support membrane being formed of silicon.

28. - 33. (canceled)

34. (previously presented) An array comprising a plurality of the composite microfilter structure recited in claim 27.

35. (previously presented) The structure recited in claim 27, wherein the support membrane comprises a porous silicon wafer.

36. (previously presented) The structure recited in claim 27, wherein the separation membrane is about 1 μm thick.

37. (previously presented) The structure recited in claim 27, wherein the separation membrane is lithographically patterned with a plurality of micropores therethrough.

38. (new) The structure recited in claim 27, wherein the support membrane is provided with a plurality of micropores therethrough having broader average diameter than the plurality of micropores of the separation membrane.

39. (new) A composite asymmetric microfilter structure comprising at least one separation membrane selected from the group consisting of a polyimide and SILKTM, atop a support membrane, the support membrane being selected from the group consisting of silicon, silicon dioxide, silicon nitride, germanium and any combination thereof.

40. (new) An array comprising a plurality of the composite microfilter structure recited in claim 39.

41. (new) The structure recited in claim 39, wherein the support membrane comprises a porous silicon wafer.

42. (new) The structure recited in claim 39, wherein the separation membrane is about 1 μm thick.

43. (new) The structure recited in claim 39, wherein the separation membrane is lithographically patterned with a plurality of micropores therethrough.

44. (new) The structure recited in claim 39, wherein the support membrane is provided with a plurality of micropores therethrough having broader average diameter than the plurality of micropores of the separation membrane.